

Solid Waste and Recycling Committee

Alfred Home Composting Program

Purposes:

- * create a community working together to improve solid waste management by simple yard composting.
- * tell the community the negatives of making yard trimmings leave home and the positives of keeping them at home and making them work for you.

The Solid Waste Committee is deeply committed to working toward the reduction of solid wastes disposal in the town of Alfred through strong efforts of recycling. Improvements in our waste disposal reduction efforts have seen us recycle to an average rate of 43% over the past 9 years. A commendable effort, to be sure, but the committee must move on to improve our efforts in the area of recycling.

Organic landscape materials, including leaves, woody trimmings and grass clippings typically account for between 15% and 20% of a community's annual solid waste. During peak leaf drop in the fall when residents are bagging leaves, organic materials may account for as much as 50% of the incoming transfer station volume.

With the exception of large woody brush, residents can recycle all their organic materials right in their own yards through composting, mulching and grass-cycling. Organic matter adds valuable nutrients back to the soil, improves the condition of our soils, helps insulate the soil from temperature extremes, and helps plants survive dry periods by holding moisture in our soils.

Today we introduce to you another method of recycling, and that is **Composting**. Many of you are now composting and probably have done so for years, but for many of us this is a new avenue to recycling and unknown territory. The solid waste committee is in the process of initiating a town-wide **Composting Program**. The program seeks to evaluate who is presently composting; provide educational materials so that the residents can begin immediately to compost in their own backyards; offer ongoing informational hints on "what to do" and "what not to do". With spring just starting we feel that this is a good time to start.

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#### **The Compost Container**

A container of some sort helps to keep the yard neat and the neighbors happy. A covered container also means the pile can retain both heat and nutrients, while keeping out rodents, raccoons and pets.

Hot compost piles need regular turning, and you will want to harvest finished compost from time to time. So above all, the container should make it easy to do the work. Beyond that consideration, you are safe in choosing a container for its appearance, convenience, cost, or size.

All sorts of composting units are available commercially. Some are simply "digesters", such as a cone covering a collecting basket in a pit. Others, with solid bases, have doors or chutes to let you harvest the compost from the bottom and put it to use.

Your own system may be as simple as a circle of chicken wire, or a bottomless barrel with air holes in its sides. Just lift it away from the pile, set it up again nearby and put the newer layers back in, leaving behind the finished compost.

Alfred has ready-made composting bins available for purchase at the Transfer Station. The cost is a reasonable \$39.50 for the bin. We ask you to register your name with us so that we can provide you with helpful information on composting from time to time.

## **What is Compost?**

Compost is the controlled decomposition of organic matter through biological processes with the end result being nutrient-rich humus. The word “compost” means to put together. Composting involves the putting together of a mixture of vegetable residue, animal matter, soil and water to form humus. Just as variety is the spice of life, a variety of different organic materials makes the best compost.

## **Why Compost?**

Composting is one way we can manage and recycle our organic landscape materials and manufacturing humus for improving our soils. Composting will also reduce the volume of organic materials by about 80% as they decay. Every resident who has a landscape should also be composting organic materials. It may be done as simply as piling organic materials in an out-of-the-way place in the backyard and letting them rot on their own. Or you may want to build or purchase a compost bin that will accelerate the composting process. Composting will improve the productivity of your soil and the growth of plants in your landscape and garden. Composting is the cornerstone of waste source reduction. Source reduction means delivering less stuff to the transfer station, thus saving the town of Alfred money in costs for disposal.

The main purpose of the Alfred Home Composting Program is for our residents to understand composting. By composting at home and other methods of landscape recycling, we can reduce the volume entering our transfer station by at least 20%. Like other forms of recycling, home composting, mulching and grass-cycling allow our Alfred citizens to have a hand in solid waste reduction.

This program involves more than just saving on the volume entering our transfer station, it is our hope that the training will help our citizens gain a deeper understanding and greater appreciation for organic recycling and its benefit to your living environment. By returning to the earth what Mother Nature provides, your landscape and garden plants will thrive. Once you learn the simple techniques and discover the benefits, you will want to show others just how simple it is to get involved. Remember, it's not waste until it is wasted, and there is no reason to throw away what can be recycled. Composting is one of the easiest of all recycling techniques; it requires no sorting or hauling. All you need is a little bin.

## **How To Compost**

As a composter, you can put as much effort as you like into your composting system, but at its heart composting is really a very simple process that needs only minimal maintenances. Once you understand the basics, you will need to choose a bin system and build or purchase it (of course, bin-less compost piles can work just fine as well). With an understanding of the fundamentals, a spot set up for composting, and a few ingredients, you'll be ready to build a compost pile.

## **Composting Fundamentals**

Good composting is a matter of providing the proper environmental conditions for microbial life. Compost is made by billions of microbes that digest the yard and kitchen wastes (food) you provide for them. If the pile is cool enough, worms, insects, and their relatives will help out the microbes. All of these will slowly make compost out of your yard and kitchen wastes under any conditions. However, like people, these living things need air, water, and food. If you maintain your pile to provide for their needs, they'll happily turn your yard and kitchen wastes into compost much more quickly. Keep in mind the following basic ideas while building your compost piles.

## **AIR**

Composting microbes are *aerobic* -- they can't do their work well unless they are provided with air. Without air, *anaerobic* (non-air needing) microbes take over the pile. They do cause slow

decomposition, but they tend to smell like putrefying garbage! For this reason, it is important to make sure that there are plenty of air passageways into your compost pile. Some compost ingredients, such as green grass clippings or wet leaves, mat down very easily into slimy layers that air cannot get through. Other ingredients, such as straw, do not mat down easily and are very helpful in allowing air into the center of a pile. To make sure that you have adequate aeration for your pile and its microbes, thoroughly break up or mix in any ingredients that might mat down and exclude air. You can also *turn* the pile to get air into it, which means completely breaking it apart with a spade or garden fork and then piling it back together in a more “fluffed-up” condition.

### **Water**

Ideally, your pile should be as moist as a wrung-out sponge to fit the needs of compost microbes. At this moisture level, there is a thin film of water coating every particle in the pile, making it very easy for microbes to live and disperse themselves throughout the pile. If your pile is drier than this, it will not be a very microbial habitat, and composting will be slowed significantly. If your pile is a great deal wetter, the sodden ingredients will be so heavy that they will tend to mat down and exclude air from the pile, again slowing the composting process (and perhaps creating anaerobic odor problems). If you are using dry ingredients, such as autumn leaves or straw, you will need to moisten them as you add them to the pile. Kitchen fruit and vegetable wastes generally have plenty of moisture, as do fresh green grass clippings and garden thinning. Watch out for far-too-soggy piles in wet climates (a tarp may help to keep rain off during wet weather). In dry climates, it may be necessary to water the pile occasionally to maintain proper moisture.

### **Food**

In broad terms, there are two major kinds of food that composting microbes need.

**Browns** are dry and dead plant materials such as straw, dry brown weeds, autumn leaves, and wood chips or sawdust. These materials are mostly made of chemicals that are just long chains of sugar molecules linked together. As such, these items are a source of energy for the compost microbes. Because they tend to be dry, browns often need to be moistened before they are put into a compost system.

**Greens** are fresh (and often green) plant materials such as green weeds from the garden, kitchen fruit and vegetable scraps, green leaves, coffee grounds and tea bags, fresh horse manure, etc. Compared to browns, greens have more nitrogen in them. Nitrogen is a critical element in amino acids and proteins, and can be thought of as a protein source for billions of multiplying microbes.

A good mix of browns and greens is the best nutritional balance for the microbes. This mix also helps out with the aeration and amount of water in the pile. Browns, for instance, tend to be bulky and promote good aeration. Greens, on the other hand are typically high in moisture, and balance out the dry nature of the browns.

### **Other Things to Consider**

A common misunderstanding about compost piles is that they must be **hot** to be successful. This just is not true. If you have good aeration and moisture, and the proper ingredient mix, your pile will decompose just fine at temperatures of 50 degrees Fahrenheit or above.

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